

What is claimed is:

1. An optical disk device comprising:

drive means for driving in rotation an optical disk having  
5 a wobbled track;

irradiating means for irradiating a light beam onto the  
optical disk;

light receiving means for receiving the light reflected  
from the optical disk and outputting an electric signal  
10 corresponding to the reflected light; and

wobble signal reproducing means for reproducing, from the  
output electric signal of the light receiving means, a wobble  
signal corresponding to a wobble of the track, said wobble signal  
reproducing means including

15 detection means for detecting a center frequency of  
the wobble signal, and

extracting means for extracting the wobble signal  
from the output electric signal on the basis of the center frequency  
detected by the detection means.

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2. The optical disk device according to claim 1, wherein said  
detection means including

a band-pass filter having a pass band being set to pass  
the wobble signal within a range of driving in rotation of the  
25 optical disk by said drive means, and

a frequency detection means for detecting a frequency of  
the wobble signal which has passed through said band-pass filter,

wherein said extracting means extracts the wobble signal from the output electric signal on the basis of the frequency detected by said frequency detection means.

5 3. The optical disk device according to claim 1, wherein said detection means including

storage means for storing a relationship between the position of irradiation of the light beam and the center frequency of the wobble signal, and

10 calculation means for, on the basis of said relationship, calculating a center frequency of the wobble signal at a target irradiating position of the light beam to be achieved by a seek operation.

15 4. The optical disk device according to claim 1, wherein said drive means drives the optical disk at a constant angular velocity.

5. The optical disk device according to claim 2, wherein said drive means drives the optical disk at a constant angular velocity.

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6. The optical disk device according to claim 3, wherein said drive means drives the optical disk at a constant angular velocity.

25 7. The optical disk device according to claim 1, wherein said drive means drives the optical disk at a constant linear velocity, and said detection means performs detection of the center frequency of the wobble signal immediately after a seek operation

of said irradiating means.

8. The optical disk device according to claim 2, wherein said drive means drives the optical disk at a constant linear velocity, 5 and said detection means performs detection of the center frequency of the wobble signal immediately after a seek operation of said irradiating means.

9. The optical disk device according to claim 3, wherein said 10 drive means drives the optical disk at a constant linear velocity, and said detection means performs detection of the center frequency of the wobble signal immediately after a seek operation of said irradiating means.